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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,198	03/24/2006	Kazunori Tanaka	Q93230	1919
23373 7590 04/20/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
PHAN, THIEM D				
ART UNIT		PAPER NUMBER		
3729				
MAIL DATE		DELIVERY MODE		
04/20/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/573,198

**Applicant(s)**

TANAKA ET AL.

**Examiner**

THIEM PHAN

**Art Unit**

3729

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-23 is/are pending in the application.
- 4a) Of the above claim(s) 19-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-18, 22, 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- \_\_\_\_\_ Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- \_\_\_\_\_ Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 02/13/09 has been entered.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the original specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants are requested to specifically delineate what is included and excluded by the term "...said praying is uniform in thickness." and the like language. Throughout the specification, applicants have failed to specifically define them.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. The claimed language "...said praying is uniform in thickness." is confusing and unclear because the specification discloses that an approximate range of thickness of the coating or insulation layer is provided (Specification, paragraph 0034, line 10). This language not only is held to be vague and indefinite, the metes and bounds or scope of the claimed subject matter cannot be determined in the disclosure.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 13-18, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denki (JP60-18648) in view of Boldebeck et al (US 3,440,197).

**Regarding claim 13**, Denki teaches a process of insulating a stator slot in a rotating electric machine, comprising:

- preparing a stator core having plural slots (Fig. 2, 7) in an inner peripheral surface, each slot of the plural slots has a slot peripheral wall and slot opening that opens in the inner peripheral surface, the slot peripheral wall of each slot has a slot bottom wall and a pair of slot side walls opposing to each other and continuing to the slot bottom wall;

- forming an electrical insulation material (Fig. 8, 8) on the slot peripheral wall of each slot to form an insulation coating, except for spraying a powder of an electrical insulation material or painting a layer of insulation material;
- cutting into the insulation coating on the pair of slot side walls at vicinity of the slot opening to form a pair of holding grooves (Fig. 8, 12) opposing each other, each of the pair of holding grooves has a groove wall (Inside of 12);
- disposing a stator winding having plural winding member such that each winding member (Fig. 2, 2) of the stator winding is inserted inside each slot; and
- inserting an electrical insulation member (Fig. 8, 6) between the groove walls of the holding grooves for closing the slot opening, wherein the insulation coating is formed over continuously from the slot bottom wall to the pair of slot side walls and the groove walls of the holding grooves are formed in the insulation coating on the slot side walls.

Boldebuck et al teach a process of coating the slot of a motor by spray-coating (Col. 5, lines 50-52), in order to obtain a fine good coating film.

It would be obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Denki, by applying the spray-coating, as taught by Boldebuck et al, in order to obtain a fine good coating film.

**Regarding claim 14**, Denki teaches that the holding grooves are formed so that a depth of each of the holding grooves (Fig. 8, 12) is smaller than a thickness of the insulation coating (8).

**Regarding claim 15**, Denki teaches that the holding grooves are formed so that each holding groove (Fig. 8, 12) has a groove bottom wall and a pair of groove side walls opposing to each other, and the groove bottom wall and the pair of groove side walls are formed in the insulation coating.

**Regarding claim 16**, Denki teaches that the pair of groove side walls is formed so that a clearance is formed between one of groove (Fig. 8, 12) side walls and the electrical insulation member (6).

**Regarding claim 17**, Denki teaches that each groove bottom wall is formed so that a clearance is formed between the groove (Fig. 8, 12) bottom wall and the electrical insulation member (6).

**Regarding claim 18**, Denki teaches that each pair of groove side walls of the holding grooves (Fig. 8, 12) are formed so that the inner one of the pair of groove side walls positioned on an inner side of each slot is formed to tilt in a depth direction of each slot, due to its insulated flexibility.

**Regarding claim 22**, Denki teaches that the depth of each of the holding grooves (Fig. 8, 12) is defined in the direction of the thickness of the insulation coating.

**Regarding claim 23**, as best understood, Denki in view of Boldebuck et al teach the insulation coating is uniformly formed in thickness at the portion around the holding grooves (Fig. 8, 12).

### ***Response to Arguments***

8. Applicants' arguments/remarks with respect to claims 13-18, 22 and 23 have been considered but are moot in view of the new ground(s) of rejection, especially with the amended claims 13 and 23, which are rejected under 35 U.S.C. 103(a) as being unpatentable over Distefano et al in view of Boldebuck et al,

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M & Tu, 6AM - 2PM, and W & Th, 9AM – 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phan Thiem/

Primary Examiner, Art Unit 3729

April 20, 2009